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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,861	03/12/2004	Vijay Deshmukh	67272-8061.US01	1723
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Perkins Coie LLP P.O. Box 1208 Seattle, WA 98111-1208			EXAMINER LOVEL, KIMBERLY M	
			ART UNIT	PAPER NUMBER
			2167	
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			02/06/2009 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/799,861

**Applicant(s)**

DESHMUKH ET AL.

**Examiner**

KIMBERLY LOVEL

**Art Unit**

2167

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10, 14 and 31-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10, 14 and 31-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date 11/13/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This communication is in response to the Amendment filed 16 January 2009.
2. Claims 10, 14 and 31-36 are pending in the current application. Claims 1-9, 11-13 and 15-30 have been canceled. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. This action is made Non-Final.
3. The rejections of claims 10, 14 and 31-36 as being unpatentable over US Patent No 6,571,257 to Duggan et al in view of US Patent No 6,553,377 to Eschelbeck et al in view of US Patent No 7,089,313 to Lee et al have been withdrawn.

***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on 27 August 2008 was filed after the mailing date of the Non-Final Office Action. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 10, 14 and 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,571,257 to Duggan et al (hereafter Duggan) in view of US PGPub 2008/0091739 to Bone et al (hereafter Bone).**

**Referring to claim 10**, Duggan discloses an apparatus comprising:

a storage server, coupled to the network, having a mass storage device (see Fig 1);

a multi-appliance management application (MMA) [storage management application 120] coupled to the network to manage the storage server (see Fig 1); and

an agent device [data collection agent] coupled to the storage server and the MMA via the network, the agent to scan a file and directory structure [file system] of a storage server [data collection] to collect information about files maintained by the storage server (see column 3, lines 54-60) and to combine information collected into a summary of a directory under which the files is located, the summary being accessible to the MMA (see column 4, lines 13-18), wherein the MMA and the storage server are separate devices (see Fig 1).

While Duggan discloses that the MMA and the storage server are separate devices, Duggan fails to explicitly disclose wherein the agent is separate from the MMA. Duggan also fails to explicitly disclose the further limitation wherein the agent uses a file system different from any file system that the agent utilizes. Bone discloses the managing and controlling of file systems (see abstract and [0002]) utilizing collection agents to collect metadata about the file system (see [0081]), including the further limitations wherein the agent [agent] is separate [remote] from the MMA [file system manager] (see [0085]) and wherein the agent uses a file system different from any file system that the agent utilizes (see [0110] and [0120]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the data collection agent of Duggan to be remote as is disclosed by Bone. One would have been motivated to do so in order to create a three-tier system which increases the efficiency of managing the storage resources by load-balancing the processes of data collection and management and also in order to increase the efficiency of the collection process by allowing devices with different protocols to communicate with one another.

**Referring to claim 14**, the combination of Duggan and Bone (hereafter Duggan/Bone) discloses the apparatus of claim 10, further comprising a graphical user interface (GUI) coupled to the MMA (Bone: see [0143]).

**Referring to claim 31**, Duggan/Bone discloses the apparatus of claim 14, further comprising a database [item 708] coupled to the MMA, the database to store the

summary (Bone: see Fig 7; Duggan: see column 4, lines 9-18 and Fig 2 and associated text).

**Referring to claim 32**, Dugan/Bone discloses the apparatus of claim 31, wherein the summary can be retrieved via the GUI (Bone: see [0143]).

**Referring to claim 33**, Dugan/Bone discloses the apparatus of claim 31, wherein the agent uses a Common Internet File System (CIFS) or a Network File System (NFS) (Bone: see [0110]).

**Referring to claim 34**, Duggan discloses a method comprising:

causing an agent device [data collection agent] to scan a file and directory structure [file system] of a storage server [data collection] to collect information about files maintained by the storage server (see column 3, lines 54-60);

combining, by the agent device, information collected into a summary of a directory under which the files are stored [aggregating storage information across multiple managed hosts 105 and presenting results to the system manager] (see column 4, lines 14-18); and

sending the summary from the agent device to a multi-appliance management application (MMA) (see column 4, lines 13-14), wherein the agent device, MMA, and the storage server are separate devices (see Fig 1).

While Duggan discloses that the MMA and the storage server are separate devices, Duggan fails to explicitly disclose wherein the agent is separate from the MMA. Duggan also fails to explicitly disclose the further limitation wherein the agent uses a file system different from any file system that the agent utilizes. Bone discloses the

managing and controlling of file systems (see abstract and [0002]) utilizing collection agents to collect metadata about the file system (see [0081]), including the further limitations wherein the agent [agent] is separate [remote] from the MMA [file system manager] (see [0085]) and wherein the agent uses a file system different from any file system that the agent utilizes (see [0110] and [0120]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the data collection agent of Duggan to be remote as is disclosed by Bone. One would have been motivated to do so in order to create a three-tier system which increases the efficiency of managing the storage resources by load-balancing the processes of data collection and management and also in order to increase the efficiency of the collection process by allowing devices with different protocols to communicate with one another.

**Referring to claim 35**, Duggan/Bone discloses the method of claim 34, wherein the MMA sends the summary to a database server (Duggan: see column 4, lines 9-18), which stores the summary as a table [table] or histogram (Duggan: see Fig 2 and associated text).

**Referring to claim 36**, Duggan/Bone discloses the method of claim 34, wherein the agent uses a Common Internet File System (CIFS) or a Network File System (NFS) (Bone: see [0110]).

***Response to Arguments***

7. Applicant's arguments filed in regards to the Duggan reference on pages 6 and 7 of the Remarks have been fully considered but they are not persuasive. The Applicant states "Duggan does not disclose ... particularly a summary of a directory in which the file is located."

8. The examiner respectfully disagrees. Column 4, lines 12-21 of Duggan states that the management application stores the initialization data in a repository. The application collects this information from all hosts, aggregates it and presents the data to system manager. According to column 3, lines 40-45 of Duggan, the data collected during the initialization phase include files storage attributes collected in order to create a snapshot of the storage layout. It is considered to be inherent that a file system is made up of directories. Therefore, a summary of a directory is considered to be analogous to a summary of a file system. According to the Applicant's specification, the summary is merely a table of file and directory attributes. Furthermore, neither the specification nor the claim limitation explicitly limits the type of information stored in the directory.



***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY LOVEL whose telephone number is (571)272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John R. Cottingham/  
Supervisory Patent Examiner, Art Unit 2167

/Kimberly Lovel/  
Examiner  
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30 January 2008  
/kml/

